4.0 Business Management

To further accelerate the Office of Environmental Management (EM) cleanup, Department of Energy (DOE)–Savannah River Operations Office (SR) is developing new business management approaches. Key changes have occurred in the areas of contracting and performance monitoring. The contracting strategy with the site's Management and Operating (M&O) contractor has shifted from a traditional M&O approach to a Cost Plus Incentive Fee-like approach. An innovative method of providing incentive to accelerate cleanup formed the basis of recent renegotiations between SR and the site's M&O contractor. In the area of performance monitoring, SR has shifted from a management and control system focused on annual performance to a project management system focused on end state objectives. Effective project management methods and processes will provide assurance of the successful accomplishment of performance objectives.

SR will pursue an aggressive acquisition strategy to achieve efficient approaches to accelerate cleanup. To ensure effective assessment and reporting of performance, SR will assume the role and responsibility of integrator of all EM Cleanup Project performance reporting. An integrated project management system will be developed, maintained, and managed by SR.

Recognition of management challenges and the continuing commitment to meet these challenges are integral to success. These management challenges include, but are not limited to:

- maintaining the ongoing commitment to implementation of integrated safety management and continued excellence in safety performance
- § continued realignment/restructuring of the SR Field Office to facilitate contractor interfaces in a manner that supports achievement of the accelerated cleanup plan
- assuring human resource goals and objectives for the SR office as specified in the *DOE-SR 5-Year Workforce Management Plan* are met
- assuring prompt resolution of contractor skills mix and related workforce management issues

- continuing to strengthen federal and contractor project manager and project control specialist capabilities and related project management and project control systems
- pursuit of an aggressive acquisition strategy to achieve efficient approaches to accelerate cleanup
- aligning performance monitoring, measuring, and reporting systems to conform with Government Performance Results Act (GPRA) expectations particular with respect to the acceleration of the EM Cleanup Project described in this plan
- assuring management and control systems are in place to effectively maintain minimum essential requirements
- streamlining or tailoring certain DOE Order requirements that are inapplicable or inappropriate for "cleanup" activities at the site
- maintaining a strong commitment to regulatory interface and stakeholder involvement.

4.1 Work Breakdown Structure

A key element of the site's management and control systems is the Work Breakdown Structure (WBS). A site-wide WBS is maintained to define required project work activity planning, cost estimating, cost collection and reporting levels. The WBS is under configuration control. Changes are approved through an established change control process.

Level 1 of the site's WBS hierarchy represents the total SRS. Level 2 represents a specific program, as illustrated by Table 4.4.1. Level 3 of the WBS generally corresponds to a facility, process, line item, or specific cleanup project, e.g., Project Baseline Summary (PBS), as illustrated by Table 4.4.2.

Level 1 of the Site's WBS hierarchy is provided below:

§ 01 DOE-SRS

Note: DOE-SRS includes the Department of Energy–Savannah River Operations Office (DOE-SR); the National Nuclear Security Administration–Savannah River Site (NNSA); Westinghouse Savannah River Company (WSRC); Wackenhut Services, Incorporated (WSI); Savannah River Ecology Laboratory (SREL); the United States Forest Service (USFS); and other site contractors.

The WBS employs a hierarchical coding structure to organize both work and resources. Work is organized through the use of the WBS, and site resources are linked and traceable to both responsible and performing organizations. The WBS structure reflects the plan, resources, and responsibility for accomplishing work.

The WBS was recently modified to reflect the new Department of Energy–Headquarters (HQ) directed PBS structure and the redefinition of the site contractor's work scope. EM work scope is captured in a single Level 2 WBS element: 01.30 EM Closure. Other site work and the responsible organizations are identified with their own Level 2 designation. Table 4.1.1 demonstrates these Level 2 identifiers.

Table 4.1.1 SRS Level 2 Work Breakdown Structure

WBS	WBS Description
01.03	Tritium
01.07	Work for Others – DOE Complex
01.08	Work for Others – Non DOE
01.14	Office of Science and Technology
01.16	Waste Generator Set-Aside Fee Program
01.17	Other Funded Non-Work Accounts
01.24	Office of Security & Emergency Operations
01.25	NNSA
01.30	Environmental Management Cleanup Project
01.40	New Tritium Production Mission

SR has defined by program the EM work scope to be performed by the site M&O in the contract's Statement of Work contained in the *Performance Evaluation and Measurement Plan and Contract Management/Oversight Plan (PEMP)* (contract between DOE-SR and WSRC, Contract No. DE-AC09-96SR18500). For other site contractors, work scope by program is defined in their respective contracts. The EM work scope is projectized in a separate Level 3 element within the 01.30 portion of the WBS. Table 4.1.2 shows the Level 3 WBS elements and PBS structure within the 01.30 EM Cleanup Project.

Table 4.1.2 SRS Level 3 Work Breakdown Structure

WBS	PBS	WBS / PBS TITLE
01.30.01	SR-0011A	Nuclear Material Stabilization and Disposition – 2006
01.30.02	SR-0011B	Nuclear Material Stabilization and Disposition – 2012
01.30.03	SR-0014C	Radioactive Liquid Tank Waste Stabilization and Disposition
01.30.04	SR-0040	Nuclear Facilities D&D
01.30.12	SR-0030	Soil & Groundwater Remediation
01.30.14	SR-0011C	Nuclear Material Stabilization and Disposition – 2035
01.30.15	SR-0012	Spent Nuclear Fuel Stabilization and Disposition (Includes PBS DOE-HQ-0012X)
01.30.16	SR-0013	Solid Waste Stabilization and Disposition
01.30.20	SR-0020	Safeguards and Security
01.30.10	SR-0100	Non Closure Mission Support
01.30.11	SR-0101	Community and Regulatory Support
01.30.00	SR-PD	Federal Program Direction

Below Level 3, the work scope is defined by area in a separate Level 4 element are further defined by subproject in a separate Level 5 element. The *subproject* is the primary focal point in the management and control of the work.

Below Level 5, contractors expand the WBS to facilitate internal control. The lowest WBS element, the *terminal* element, is supported by cost activity codes. These cost activity codes are utilized in the collection of actual costs and are unique to a given *terminal* WBS element. To ensure each element reflects total resources required, all

indirect cost, overhead cost and fee are allocated against the direct costs in accordance with accepted site procedures.

The WBS is the management tool through which work scope, schedules for execution of work and associated cost are integrated. The WBS is utilized in defining scope, schedule and cost baselines.

Definitions for each WSB element through Level 5 are provided in a WBS dictionary. For WSRC, a WBS Summary Worksheet in the WBS dictionary describes each of the subprojects (Level 5) and work sets (Level 6). These worksheets describe work scope to be accomplished, including key planning assumptions, milestone definitions, Government Furnished Services and Items (GFSI), and the basis for performance measurement. Dictionaries also exist for other site contractors and are included in a corresponding WBS.

4.2 Acquisition Strategy and Contract Management

SR utilizes contracts to execute the environmental cleanup word scope at SRS. The majority of the cleanup scope falls within the M&O contract, currently WSRC. Security services are provided under separate contract, currently awarded to Wackenhut Services, Inc. SR has a number of additional direct contracts to provide services or perform discrete work scope.

SR is employing new contracting strategies to achieve Departmental objectives. The new strategies are challenging both the federal workforce and site contractors to re-examine traditional approaches to work accomplishment and to develop new approaches that will accomplish more work for less cost.

During 2003, DOE-SR renegotiated the existing contract with WSRC and its integrated partners for the management and operation of SRS. Contract Modification M100 was implemented in June 2003. Execution of this contract modification constitutes a shift from the traditional M&O approach to a Cost Plus Incentive Fee-like approach to achieve accelerated cleanup. An innovative method of providing incentive to the contractor is the basis of the new approach: the Department is providing a commitment for a funding profile for the duration of the contract and a scope of work; the contractor is being provided an opportunity for increased fee through significant acceleration of the cleanup schedule.

SR has also reevaluated its traditional approach of reliance upon a single contractor to execute all site environmental cleanup work scope. EM work scope is now being assessed strategically and contracting strategies employed based on criteria established for discrete scopes of work. This approach has resulted in several work projects being identified for accomplishment through direct contracts managed by the federal workforce. Examples include the Salt Waste Processing Facility and the Glass Waste Storage Building 2. In these instances, the federal employees are assuming a significant role in the project management, implementation, and execution process.

Within the next three years, two of the major site contracts, the M&O contract and the site security contract, will be recompeted through open competition. Open competition will be utilized to ensure the best overall value to DOE in executing the EM Cleanup Project. As aforementioned, discrete scopes of work will continue to be

evaluated for accomplishment through direct contracts managed and executed by DOE. SR will continue to provide opportunities for small business to the maximum extent possible, consistent with capabilities of small business and Departmental mission requirements.

4.3 Organizational Structure and Responsibilities

Organizationally, SR is a reporting Field Office to HQ's Office of Environmental Management (EM), headed by the Assistant Secretary of Environmental Management (EM-1). EM-1 is responsible for environmental management missions and facilities, and provides landlord services at SRS. The Manager, SR, reports to EM-1 and is responsible for managing the Field Office consistent with HQ guidance; executing assigned programs; overseeing site-wide facility operational performance, including environment, safety and health, and safeguards and security; and is the lead contracting authority for all prime contracts at SRS.

SR utilizes contracts to execute the environmental cleanup work scope at SRS. The majority of the cleanup scope falls within the M&O contract, currently WSRC. Security services are provided under separate contract, currently awarded to Wackenhut Services, Inc.

4.3.1 SR Organization Structure and Management

To implement the mission requirements of this *PMP*, SR developed the *Organizational Performance Management Plan (OPMP*), which defines the goals and annual objectives for SR's technical operations and business management systems. The *OPMP* is consistent with and supports the goals and priorities established by EM-1, as well as the *President's Management Agenda*, the Secretary of Energy's strategic missions and priorities, and the DOE-HQ Strategic Plan. The *OPMP* establishes site-wide programmatic and business goals and objectives to achieve SR's accelerated cleanup mission. These SR goals are then deployed throughout the organization through specific plans and employees' performance plans.

SR is committed to conducting work at SRS safely, securely, and efficiently, consistent with DOE environmental management missions and objectives. To meet this commitment, SR has established a management system that relies on integrated processes for work planning, budgeting, work authorization, execution, and change control for SR and its contractor organizations, consistent with DOE P 450.4, *Safety Management System Policy*. It is implemented through the integration and execution of formal procedures and programs that include the involvement of workers throughout the organization. Of key importance in this system is the establishment of clear roles, responsibilities, and authorities for employees and organizations.

Safety management is an integral part of SR's management system based on the guiding principle that DOE line management is responsible for safety. The safety management functions, responsibilities, and authorities of the SR organizational elements are outlined in DOE P 411.1, *Safety Management Functions, Responsibilities, and Authorities Policy*, and DOE M 411.1-1B, *Safety Management Functions, Responsibilities, and Authorities*, as well as specific delegations by EM.

4.3.1.1 SR Organization Structure

The SR organization structure consists of both line management organization and support organizations. Line management organizations have responsibility for the safe, secure, and efficient operation of DOE facilities and activities under their purview. Assistant Managers (AMs) and Office Directors (ODs) provide programmatic support to the Manager, SR, and have delegated authority to represent line management. The direct reports to the Manager comprise the SR Senior Management Team (SMT) and, as such, provide the leadership and set the example for SR employees as to how to work together to achieve the mission.

Services provided by organizations in support of the EM mission include: environment, safety and health; legal; procurement; property management; fiscal management; human capital management; equal employment opportunity and diversity administration; scientific and technical information management; public affairs administration; technical support; engineering; quality assurance; records management; administrative documentation; budget preparation, execution, and evaluation; obligation and expenditure control of appropriated funds; and other miscellaneous services.

SR implemented a major reorganization in June 2003 to focus site resources and activities on the vision to accelerate completion of the site's EM mission. The resulting SR structure provided for a Deputy Manager for Cleanup (DMC) and a Deputy Manager for Business (DMB) to oversee the M&O's Closure and Operations Business Units.

Organizations reporting to the DMC include:

- Assistant Manager for Closure Project
- Assistant Manager for Nuclear Material Stabilization Project
- Assistant Manager for Waste Disposition Project
- Office of Environment, Safety, and Health
- Office of Cleanup Projects Management
- Cleanup Projects Integration Team
- Office of Safeguards, Security, and Emergency Services

Organizations reporting to the DMB include:

- Office for Strategic Planning and Analysis
- Field Chief Financial Officer
- Office of Human Capital Management
- Office of External Affairs
- Office of Chief Counsel
- Office of Site Services
- Office of Contracts Management
- Office of Equal Employment Opportunity and Diversity

The management functions, responsibilities, and authorities of SR are documented in SRM 300.1.1B, Chapter 1, Section 1, *DOE-SR Functions, Responsibilities, and Authorities Procedure* (FRAP). The FRAP also provides delegations of authorities to SR beyond those defined in DOE M 411.1-1B and provides mission and function statements for each SR organizational entity, identifying responsibilities assigned to each organization as defined by this *PMP*.

4.3.1.2 Federal Resource Management

The *DOE-SR 5-Year Workforce Management Plan* (*WMP*) is the tool the SR leadership uses to manage its human capital resources. The *WMP* identifies the staffing and workforce capabilities needed for continued operations and accelerated cleanup and identifies the process for transitioning employees affected by the closure of SRS facilities. The *WMP* focuses on workforce management versus staffing, emphasizing managing the workforce by shifting and/or retraining the existing SR workforce for work that is more directly tied to critical accelerated cleanup activities. The objective for SR leadership is to manage the human capital resources intentionally, creatively, and efficiently in order to appropriately reduce the current size of the SR federal workforce, while meeting the accelerated cleanup objectives identified in this PMP, preserving competence, and maintaining diversity.

In October 2003, the SR SMT began the process of allocating and identifying resources, skills, and competencies required for each PBS, as identified in Section 8.0 of this *PMP*. The results from this process serve to provide a clear link between workforce planning and work execution, as well as to resource load the Integrated Site Schedule as required by DOE M 413.3-1, *Project Management Manual*, and the *SR Integrated Project Management Implementation Plan* (PMIP). The WMP identifies the resources required to execute the accelerated cleanup mission, provide matrix support to other PSOs at SRS, and support other EM closure sites. In determining federal resource requirements, the SMT assigned resources to each PBS; analyzed the potential impacts based on retirement projections; identified resource overages due to facility closures; and identified skill shortfalls. Specific resource requirements are identified in Section 6.1, *Federal Resource Requirements*.

4.3.1.3 Federal Responsibilities

The management functions, responsibilities, and authorities of SR are documented in SRM 300.1.1B, Chapter 1, Section 1, *DOE-SR Functions, Responsibilities, and Authorities Procedure* (FRAP). The FRAP also provides delegations of authorities, and identifies organizational responsibilities. Major roles of the federal workforce are described below.

Federal Role in Contract Management and Oversight – Roles and responsibilities for federal staff regarding contract management and oversight of the prime management and operations (M&O) contract are identified in the *SR FRAP*, as well as the *PEMP*. The EM work is structured to focus on achievement of Target and Maximum Case scope by the dates set forth in the *PEMP*. The organizational structure established for administering and overseeing the requirements and provisions of primary contracts include designation as the lead contracting authority, which is the SR Manager. SR Contracting Officers assist the SR Manager in management and oversight of all aspects of the contracts.

Contracting Officer Representatives (COR) are appointed by the Contracting Officer and have primary responsibilities for technical oversight and administration of the contract, as supported by the SR staff. Duties include:

- continuously monitoring the contractor's performance against performance requirements and expectations defined in the contact
- meeting monthly with the contractor's senior management personnel to discuss the status of the contractor's performance from an overall perspective.

Roles and responsibilities regarding contract management and oversight for all other contracts are contained in the specific contract language.

Federal Role in Project Management - Roles, responsibilities, and accountabilities for managing projects are identified in DOE Order 413.3, *Program and Project Management for the Acquisition of Capital Assets*, and more specifically in SR Manual 410.1.1D, *SR Project Management Manual* (PMM). Specifically, responsibilities of the Federal Project Director include, but are not limited to:

- serving as the federal official responsible and accountable for overall success of the project;
- tailoring DOE project management requirements to the specific project;
- approving justification for mission need;
- approving project execution plans;
- ensuring SR requirements and commitments are included in project schedules;
- signing all acceptance documents; and
- having overall responsibility for the cost of the project through the project cycle.

Federal Authorities and Delegations - The *SR FRAP* delegates approval authority for specified actions to the incumbents of designated positions to approve or disapprove actions proposed by the contractor under the terms of the contract. The delegated officials are authorized to act within the stated limits of the delegation. Delegations related to contractor activities include:

- Change Control Authority – The SR Baseline Configuration Control Board (BCCB), chartered by the SR Manager, approves or disapproves change control requests that crosscut AM/OD areas of responsibility. AM/ODs approve or disapprove change control requests within their assigned levels of authority.
- Project Approval – Responsible AMs are delegated authority to authorize General Plant Project funding within limits established by DOE directives.

The *PEMP* identifies specific roles and responsibilities for federal staff regarding contract management and oversight.

Federal Role in Regulatory Negotiations – SR has committed to executing an integrated regulatory strategy to refocus environmental commitments on reducing risk and accelerating cleanup activities at SRS. AMCP has been designated the Lead Organization for that function. As part of that responsibility, AMCP implements the *SRS Federal Facility Agreement* (*FFA*), which is a tri-party agreement among DOE, the Environmental Protection Agency (EPA), and the South Carolina Department of Health and Environmental Control (SCDHEC), that governs the environmental remediation and high level waste tank closure program at SRS. The *FFA* establishes the roles and responsibilities of the three parties.

OESH is responsible for the *SRS Site Treatment Plan* (*STP*), which is a document that requires radioactive mixed waste to be treated to hazardous waste standards within an agreed-upon schedule. The *STP* lays out the approaches and schedule milestones for treating and managing radioactive mixed wastes that are stored or generated at SRS.

In addition, SR personnel monitor the contractor implementation of the integrated regulatory strategy; conduct long-term planning through periodic update of the *Land*

Use Controls and Assurance Plan (LUCAP) and *Land Use Controls Implementation Plans* (LUCIPs) for individual waste sites to reduce footprint of legacy facilities; and assist in the development of environmental policies and compliance strategies to support the development and execution of SR programs and operations.

Federal Role in Stakeholder Interface – As a method of ensuring SRS business management systems, technical support functions, and line missions are properly focused on driving accelerated cleanup and site closure, SR proactively communicates with and involves stakeholders in the SR decision-making processes. SR personnel provide opportunities for input from the SRS Citizen Advisory Board (CAB) at regular CAB meetings, promptly respond to CAB recommendations, and provide opportunities for public input through other avenues. SR is committed to an open and collaborative process to implement sound, appropriate, and cost-effective cleanup. Additionally SR provides information on site activities to the general public, responds to media inquiries, responds to public requests for information, and maintains an active public outreach program to promote a culture of public confidence and trust.

4.3.2 Management and Operations Contractor Organization Structure

WSRC is the managing and operating (M&O) contractor for SRS and has responsibility to execute the EM Cleanup Project. The only significant EM program exclusions are the Salt Waste Processing Facility and the Glass Waste Storage Building 2 projects, which are managed by SR. The contract additionally assigns WSRC execution scope for the National Nuclear Security Administration missions and several annually authorized Work for Others programs.

WSRC partners include the Westinghouse Savannah River Company, a subsidiary of Washington Group International (WGI); Bechtel Savannah River Company; British Nuclear Fuel Limited; BWXT; CH2M Hill; and Polestar.

In January 2003, WSRC implemented a major reorganization, designed to accelerate the progress of the environmental cleanup program at SRS. WSRC re-organized into business units aligned by specific missions and support activities. These business units are the Closure Business Unit (CBU); the Operations Business Unit (OBU); the Project, Design and Construction Business Unit; and the Field Support Services Business Unit.

The CBU and OBU have total responsibility for the execution of all WSRC project work. The Project, Design and Construction Business Unit, and the Field Support Services Business Unit are responsible for providing specific technical and business services to the two line business units.

4.3.2.1 WSRC Organization Roles and Responsibilities

The CBU has responsibility for the following PBS projects Nuclear Materials Stabilization and Disposition Project; Radioactive Liquid Waste Stabilization and Disposition Project; Soil and Groundwater Project; and Facilities Decommissioning Project.

The OBU has responsibility for the following PBS projects Nuclear Materials Storage and Disposition Project, Spent Fuel Programs; and Solid Waste Stabilization

and Disposition. In addition to the aforementioned EM PBS scope of work, the OBU has the responsibility for execution of the NNSA mission work.

The Projects, Design and Construction Services Business Unit supports the OBU and CBU by providing capital project management, design engineering and construction services.

The Field Support Services Business Unit supports the OBU and CBU by providing the following common corporate business and technical services:

- environment, safety and health (ES&H)
- safeguards, security and emergency services
- technical and quality services, including information technology
- management services (including procurement and materials management, contract administration, document and information services, and business integration and planning)
- human resources services.

4.3.3 Security Services Organization Structure

Wackenhut Services, Incorporated (WSI) is contracted by DOE to provide security support services for SRS. WSI-SRS is a paramilitary organization that provides total security services, including access control, property protection, law enforcement, criminal investigations, traffic control, canine explosives and drug detection, aviation support, river patrol, alarm equipment monitoring, and a Special Response Team.

WSI-SRS maintains a professional training staff to provide basic and specialized security training, physical conditioning, weapons training and qualification, and area specific field training. The administrative support functions are designed to ensure that the critical WSI-SRS mission is conducted effectively, safely, and in the most cost-efficient manner. The Company employs support staff professionals with expertise in performance testing, total quality, safety, human resources, compensation and benefits, resource management, logistics, computer systems, accounting, labor relations, and security program planning.

4.4 Project Management

SR has implemented a planning and execution process that reflects a project management approach to work accomplishment. The management system approach based on annual baselines, scope, and funding has been replaced by a project management system that establishes a lifecycle baseline for the EM work scope. The lifecycle baseline defines end state objectives, identifies all of the scope and a timeline to accomplish the scope, and establishes a funding profile within which the scope is to be executed.

To provide assurance of progress toward performance objectives, SR is assuming the role of integrator for the site's project management system. In the recent re-alignment and restructuring of SR, an Office of Cleanup Projects Management (OCPM) was established under the DMC. Among other responsibilities, the OCPM is responsible for managing the EM Integrated Lifecycle Schedule, the integrated risk management process, and the configuration control process, and for providing for the development and maintenance of qualified Federal Project Directors to manage projects and Project Control Specialists to monitor project performance.

To ensure the project management policies, principles and requirements of DOE Order 413.3 are met, SR issued the *PMM* (SRM 410.1.1D) and approved the *PMIP*. SR also revised the *SR Management Plan for Planning, Budgeting, Work Authorization and Control* (SRM 130.2.1B) to reflect the shift in business approach from a management system to a project management system. Contractors are required to have systems in place that support SR's role of integrator of site EM performance data.

Project Execution Plan and Lifecycle Baseline

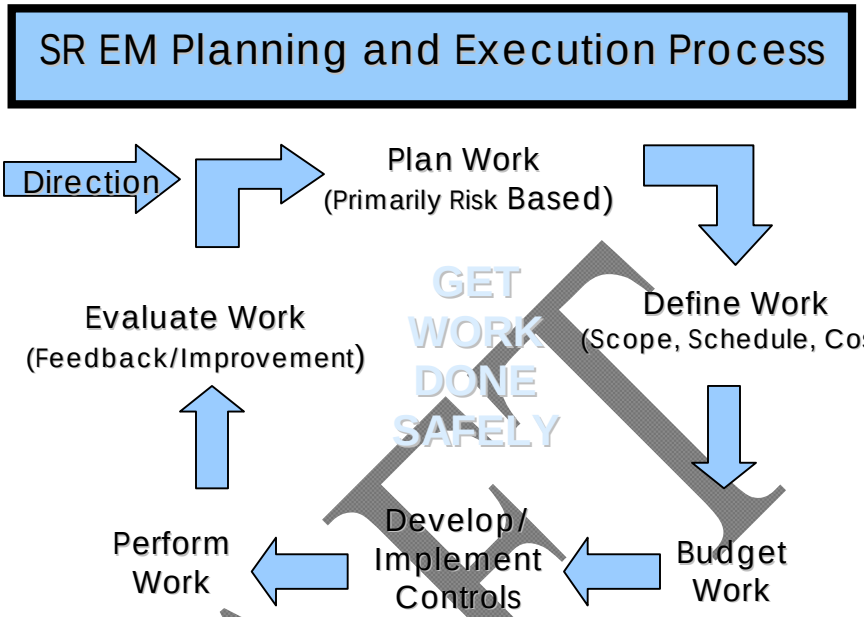
Section 8.0 of the *PMP* contains for each PBS a description of scope, cost, schedule, and key performance metrics. An integration of the PBS descriptions provide the essential elements of a lifecycle baseline for the SRS EM Cleanup Project. The sections within the *2004 PMP* and each PBS description in Section 8.0, as augmented by certain SR, SRS, or PBS-specific documents, provide the equivalent of a Project Execution Plan for the SRS EM Cleanup Project and its respective PBSs.

The costs and schedules of the individual PBSs are integrated to establish the basis of the EM Lifecycle Cost Baseline to be reflected in the Integrated Planning, Accountability, and Budgeting System (IPABS) and the EM Integrated Lifecycle Schedule.

Integrated Safety Management

SR is committed to ongoing implementation of Integrated Safety Management (ISM) and continued excellence in safety performance in the execution of the SRS EM Cleanup Project. Performing work safely is at the heart of the SR's EM Planning and Execution Process, as illustrated in Figure 4.4.1. SR management is committed to the safe performance of all work. This commitment is reflected in the contract with the M&O contractor: "The contractor shall manage and perform work in accordance with a documented Safety Management System" (reference Contract Part II, Section I, I.96 (c)). For federal staff the SR management commitment is communicated through DOE P 450.4, *Safety Management System Policy*.

Figure 4.4.1



4.4.1 Performance Monitoring, Reporting, and Evaluation

SR has implemented a performance-based oversight and assessment process to manage contracts and EM projects. This process will ensure that progress is reported against the baseline (technical, scope, cost, schedule, and key performance metrics) and facilitate management of contracts and open communications of progress and issues among SR, HQ, and the contractors. Contractors will report status to SR consistent with the requirements of the assessment process on an agreed upon schedule to provide early warning of issues that could threaten the successful completion of the accelerated cleanup goals and provide reliable and timely information to HQ. While formal reporting schedules have been established, critical issues are promptly and openly communicated to allow for early action to mitigate their impact. HQ will conduct periodic progress reviews to ensure mutual understanding of status and issues, and to provide the support required for the successful accomplishment of accelerated cleanup goals. Key measurable elements in the performance monitoring process are scope (as reflected in the case of the M&O contractor by progress against the Target Case baseline and in the case of other contractors by progress against the performance measurement baseline), performance metrics (as reflected against the Gold Metrics or established project metrics), schedule (as reflected in the EM Integrated Lifecycle Critical Path Schedule), and cost (budget baseline versus actual cost).

4.4.1.1 Performance Elements and Monitoring Processes

Performance Metrics – The primary performance metric under Contract Modification M100 is schedule acceleration. While generic performance metrics have been established for all SRS projects, the overall progress of the EM Cleanup Project during the current contract period with the M&O contractor is measured

against the Contract Performance Baseline (CPB), validated by SR in November 2003. Minimum threshold, Target Case, and Maximum Case work scope for achievement by WSRC is defined in the *PEMP*. Under the terms of the contract, annual funding levels to support work scope accomplishment are defined, as GFSI. WSRC is incentivized for schedule acceleration. Minimum threshold requirements must be achieved prior to the contractor receiving fee payments. The amount of fee earned is determined by the degree of demonstrated schedule acceleration. SR management at bi-weekly EM Performance Review meetings assesses the contractor's progress. SR staff and management validate performance prior to awarding fee.

In addition to performance being measured against the contract performance baseline, performance is measured against the lifecycle baseline. Each PBS has PBS-specific metrics as well as metrics that form the basis of SR's performance relative to the complex-wide EM metrics known as the Gold Metrics. Gold Metrics are designated as EM-HQ program elements and are under EM-HQ configuration control. Negotiation and control are at the EM-HQ Configuration Control Board (CCB) level of authority.

EM Lifecycle Integrated Schedule – SR will maintain an EM Integrated Lifecycle Schedule. SR contractors will prepare and maintain schedules for the EM work scope covered within their contract with SR. The EM Integrated Lifecycle Schedule will be a logic diagram that depicts key activities, key internal SRS interfaces, key external (DOE Complex, regulators, etc) interfaces, milestones, and the logic necessary for accomplishing the risk reduction goals. The schedule will be prepared with the SRS standard scheduling software and will have the capability for "what if" exercises that are necessary for developing working options should the baseline logic and assumptions change. All cost estimates and performance metrics will be based on the EM Integrated Lifecycle Schedule. Approval and control of the schedule will be at the SR BCCB level of authority unless a change in the schedule produces a change in the defined cleanup end point, i.e., extends the PBS baseline schedule. Cleanup end states or end points have been designated as EM-HQ program elements and are under the authority of the EM-HQ CCB.

EM Baseline Cost – The cost estimates reflect the accomplishment of the accelerated risk reduction goals, performance metrics, and the EM Integrated Lifecycle Schedule. It is recognized that the estimates for the planned work are greater than the expected funding. Accordingly, it is expected that the contractor will implement cost reductions and operational efficiencies to close this gap. Lifecycle cost as reported in IPABS is designated as an EM-HQ program element and is under the authority of the EM-HQ CCB.

Integrated Safety Management – To ensure safety performance is consistent with safety objectives outlined DOE P 450.4, *Safety Management System Policy*, SR facility representatives perform routine inspections of facilities, SR staff conduct technical assessments, and SR management provide oversight through the management walk-through program. Assurance of safety performance is provided through the use of safety metrics to identify trends and provide the basis for corrective action.

Financial Reviews – Contractors provide monthly cost reports that are reviewed by the line organizations. Financial reviews are conducted to compare costs incurred against planned expenditures, and significant variances are identified and explanations provided. These reviews serve as the basis for earned value

measurement and are utilized as a tool to monitor expenditures compared to appropriated funds. In addition, SR management reviews cost performance data at bi-weekly EM Performance Review meetings. Issues and concerns are identified and tracked to closure.

Estimates at Completion – Estimate at completion reviews are conducted quarterly with federal and contractor staff. Estimates at completion generally analyze execution of the budget by contractors, costs incurred to date, projected expenditures for the year, current spend plans, and variances.

Contracting Officers Representative Monthly Contractor Performance Feedback – In accordance with the *PEMP*, SR assesses the contractor's performance and provides feedback on a monthly basis. Each designated Contracting Officers Representative performs this review on PBSs within their areas of responsibility. This monthly review includes results of assessments and status of key metrics. The contractor's performance is evaluated with respect to five key areas: safety and security; technical capability and performance; cost effectiveness; corporate support; and performance against CPB expectations.

Semi-Annual Critical Analysis – As required in the *PEMP*, a semi-annual critical analysis is conducted which consists of a comprehensive PBS review that analyzes the overall status of the CPB as well as any key metrics. This review includes overall narrative summaries, analysis of schedule trends and project float, critical path performance, funding analysis, and project risk updates.

4.4.2 Configuration Control

Multi-year technical, scope, schedule, and cost baselines have been established in the *PMP*. The *PMP* establishes the basis for the EM lifecycle baseline. Management, control, and integration of scope, schedule and cost of the lifecycle baseline is consistent with the requirements of DOE Order 413.3. The *PMP* and lifecycle baseline also serves as the basis for updating the Department's Integrated Planning, Accountability, and Budgeting System (IPABS). The integrity of the baseline is maintained through formal change control as scope, cost, and schedule baseline changes are identified, significant cost savings initiatives are implemented, or funding assumptions change.

SR and its contractors have implemented formal techniques and procedures for baseline management and control. SR's project management process ensures that appropriate levels of control are applied to SRS projects. Baselines are developed as an integral part of the EM planning, budgeting, execution, and reporting process. The project management requirements of DOE Order 413.3 are applied to traditional capital projects and PBS projects on a "tailored approach" (i.e., major line item projects have more restrictive requirements; smaller capital equipment and general plant projects are less restrictive). The tailored approach applied to each of the PBSs is similar to that of a traditional construction project, thereby promoting a focus on completion of the overall PBS scope and not simply on managing the work.

Change Control

Changes to baselines are controlled through formal change control. EM work scope at SR is defined by the following baselines:

- Work Authorization/Execution Plan (WA/EP)
- line item and capital projects
- contract performance baseline
- IPABS PBSs lifecycle baselines
- lifecycle baseline reflected in *PMP.*

Each of the baselines is managed by their respective change control processes. However, implementation of the management and control system ensures appropriate integration of these baselines. SR and the site contractors have established configuration control boards that have been assigned levels of approval authority based on change thresholds and/or contractual authority. This approach ensures that changes can be addressed rapidly without compromising control.

The WSRC contractor has developed a WA/EP baseline for the duration of the contract period for the EM portion of the WA/EP. It reflects WSRC's plan for accelerated scope accomplishment with fixed funding provided by DOE. Under the terms of Contract Modification M100, WSRC manages the WA/EP baseline. Changes within the WA/EP that will not constitute an extension to the CPB schedule, increased cost above the fixed funding provided in the contract, or an increase or decrease of the work scope defined in the contract are under the change control authority of the M&O contractor. Changes to the WA/EP that affect the CPB require SR's approval.

The CPB is controlled through a formal change control process that ensures that changes are authorized at approved levels of authority. SR has established a Baseline Configuration Control Board (BCCB) to manage the SR baseline control process. Changes to the CPB are under the change authority of the BCCB.

Line item and capital projects follow a change control process defined in *SR PMM* (SRM 410.1.1D). If the proposed change will result in a change to the PBS within which the line item or capital project resides or the CPB, the change must be approved by the SR BCCB.

Changes that impact EM-HQ program elements must be approved by the EM-HQ CCB. The following have been designated as EM-HQ program elements:

- Performance Management Plan .....Site strategy document
- Cleanup End States/End Points.....Criteria that define completion
- EM-HQ Corporate Performance .....Schedule and lifecycle scope Metrics (Gold Metrics)
- Performance Measures/ .....Incentives to accomplish work Performance Incentives
- Annual Baseline Cost.....Cost
- Lifecycle Cost.....Cost as reported in IPABS
- Project Baseline Summary Structure.....Budget structure
- WIPP Transportation Baseline.....Key disposal interface
- Non-Labor Resources.....Budget allocation

Change control for the contract performance baseline, PBSs, and EM-HQ program elements is defined in the *SRMP* (SRM 130.2.1B).

4.4.3 Project Management Roles and Responsibilities

SR has project management systems, processes, and oversight techniques to ensure that the EM Cleanup Project baseline and mission are managed in a manner that is consistent with achieving safe, cost-efficient, accelerated cleanup. The roles and responsibilities for project management are provided below.

Field Office – In its site management capacity, SR will:

- develop and maintain a comprehensive baseline for the EM Cleanup Project, in accordance with the processes referenced above;
- realign, restructure and focus contracts and incentives (with appropriate HQ approvals) that drive performance to deliver on accelerated cleanup objectives;
- execute a performance-based oversight and assessment process to manage the contract;
- perform appropriate performance monitoring and reporting to meet the requirements of DOE O 413.3;
- provide for the development and maintenance of qualified Federal Project Directors and Project Control Specialists to manage projects and project control system processes; and
- identify requirements and appropriately tailored approaches that are safe, effective, and consistent with best practices of both project management and ISM.

Headquarters – In its capacity as the highest review and approval authority, HQ will:

- review and approve site baseline documentation and changes, as appropriate
- provide timely resolution of issues to ensure the successful accomplishment of the accelerated cleanup goals; and
- provide timely approval, as appropriate, of SR's acquisition actions.

SR Contractors – Contractors are responsible for developing the work plans and estimates required to accomplish the EM Cleanup Project goals and execute the work as planned. In the role of performer, the contractors will:

- provide detailed estimates and baseline documentation;
- maintain schedule status and report progress and issues against the schedule activities;
- report performance against baselines and performance metrics;
- report cost against approved budgets and funding levels; and
- implement requirements and appropriately tailored approaches that are safe, effective, and consistent with best practices of both project management and ISM.

4.5 Risk Management

Application of a disciplined risk management process is required for SR to achieve success in expediting the cleanup program. The SR risk management approach uses a structured, formal process as outlined in DOE M 413.3 and SRM 410.1.1D, *Savannah River Operations Office Project Management Manual*, to define risk and develop specific plans to control and/or mitigate the risk to an acceptable level. In general, risk management is a cross-cutting programmatic perspective and project

specific perspective. Risk and opportunity identification, including technical risk, is initiated early in the project process and continues throughout all the major phases. The results are documented and the risks are then quantified. Risk handling strategies are developed and implemented. Risks are tracked through the lifecycle of the project.

This ongoing process helps to ensure that risks are mitigated, minimizing cost and schedule impacts to each project and task. SR will develop specific risk management plans for each PBS to increase the probability of achieving EM completion by the end of FY 2025. SR's implementation of this risk management process increases confidence in each project's success by up-front and proactive consideration of key technical and project execution risks.

Risk Reduction through Management of the Integrated Baseline

Several parallel efforts are currently underway to reduce baseline uncertainty and risk. For example, an integrated SRS cleanup schedule has been developed to determine and manage the overall site critical path to closure. Included are key decision points that have the potential to interrupt the critical path cleanup activities. Organizational responsibilities for key activities and decisions at the federal and contractor levels have been established. Monthly meetings with federal and contractor personnel will identify and maintain a focus on resolving the high-impact issues. SR will continually identify critical issues and assign responsibilities and monitoring points to ensure successful resolution. Minimizing our risk exposure may require resequencing activities, performing work more efficiently, utilizing alternative technologies, aligning business practices, and improving contracts and incentives. In some cases project risk will be accepted to gain the benefit of more advanced cleanup and waste processing approaches.

Risk Reduction through the Involvement of Stakeholders and Regulators

Early stakeholder input in SR's decision-making process is required, including reaching agreement with regulatory agencies on cleanup strategies and specific technical solutions. SRS builds on its established processes for stakeholder involvement, including the SRS Citizens Advisory Board, to ensure all affected stakeholders have an opportunity for input into the decision-making process. DOE and SRS regulators are committed to continuing the current open and collaborative process to implement sound, appropriate and cost-effective cleanup. This process has been instrumental in selection of remedies that meet regulatory requirements at reasonable cost, especially through utilization of innovative technical approaches. SRS will also engage the Defense Nuclear Facilities Safety Board early in the planning and technical decision-making process to address technical and safety concerns. Through engagement of these stakeholders in the EM Cleanup Project, issues can be identified and addressed in a way that minimizes risk to meeting overall cleanup objectives.

Risk Management Roles and Responsibilities

Field Office – In its site management capacity, SR will:

- § conduct risk assessments
- § manage critical external and interface risks

- monitor internal contractor-managed risks, taking management responsibility when deemed appropriate through contractual mechanisms
- ensure risk handling strategies are developed
- implement risk mitigation plans
- prioritize project risks
- reevaluate risks periodically.

Headquarters – In its capacity as Acquisition Executive, HQ will:

- develop risk management policies and define requirements
- review and evaluate risks during project reviews and at critical decisions
- review risk management effectiveness through internal project reviews and external independent reviews.

SR Contractors – Contractors will:

- develop and implement risk management processes to manage internal risks
- produce risk management data that allows integration across the SRS.